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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,683	02/26/2002	Peter Loc	MP0120	1548
26703	7590	12/12/2006	EXAMINER	
HARNES, DICKEY & PIERCE P.L.C.			TRAN, PHUC H	
5445 CORPORATE DRIVE			ART UNIT	
SUITE 400			PAPER NUMBER	
TROY, MI 48098			2616	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/085,683	Applicant(s) LOC ET AL.	
	Examiner PHUC H. TRAN	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☒ Claim(s) 4,12,13,15-18,22,30,33-36,39,47,48,50-53,56,60-62,66,70-72,76 and 80-82 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims rejected are 1-3,5-11,14,19-21,23-29,31,32,37,38,40-46,49,54,55,57-59,63-65,67-69,73-75,77-79 and 83.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-7, 14, 19-21, 23-26, 31-32, 37, 38, 40-42, 49, 54, 55, 57-59, 63-65, 67-71, 73-75, and 77-79 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (U.S. Patent No. 5768531)

- With respect to claims 1,19,37,54,63-64, 73-74 and 83, Lin teaches a wireless network (e.g. Fig. 1 shows the wireless network) comprising: a plurality of nodes that transmit and receive radio frequency signals (e.g. WSs in Fig. 1); and

an access point (e.g. 1 and 2 in Fig. 1) that transmits and receives radio frequency (RF) signals, that wirelessly communicates with said plurality of nodes, that generates a table containing a list of nodes operating in said wireless network, and that broadcasts said table to said plurality of nodes (e.g. block 201a in Fig. 2a),

wherein a first node of said plurality of nodes receives said table and determines a hidden status of a second node in said table (col. 4, lines 55-60).

- With respect to claims 2,3,5-6,20,21,23-24,38,40-41,55,57-58,65,67-68,75, & 77-78, Lin also teaches wherein said first node communicates directly with said second node if said

second node has a not hidden status and communicates with said second node through said access point if said second node has a hidden status (col. 5, lines 4-19).

- With respect to claims 7,25-26, & 59, Lin teaches wherein said first node includes an aging timer for other nodes in said table and wherein said first node updates said hidden status of one of said other nodes if said aging timer of said other node expires (e.g. table in Fig. 5 shows the aging counter).

- With respect to claim 31, Lin teaches wherein said first node sets said hidden status of said other nodes equal to hidden if a response to said acknowledgement request is not received within a predetermined period and sets said hidden status of said other nodes equal to not hidden if a response to said acknowledgement is received within said predetermined period (col. 7, lines 1-10).

- With respect to claims 14,32, & 49, Lin discloses wherein said table generated by said access point further includes at least one address for each of said plurality of nodes and an active/inactive status of each of said plurality of nodes (col. 7, lines 10-20).

- With respect to claims 42,69, & 79, Lin comprises timing periodically updating said means associated with said first hidden status means for hidden status of at least one of said other nodes (col. 2, lines 55-66).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2616

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-11, 27-29 and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No. 5768531) in view of Conner (Pub. No. 2004/0221080).

- With respect to claims 8-11, 27-29, and 43-46, Lin discloses all the subject matter of the claimed invention with the exception of including a packet counter and byte counter in a communications network. Connor (2004/0221080) from the same or similar fields of endeavor teaches a provision of determining the hidden status of the second node in the table (see paragraph 0027). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use a packet counter and byte counter as taught by Connor (2004/0221080) in the communications network of Lin.

The packet counter and byte counter can be implemented/modified into the network of Lin since the reference does teach bandwidth allocation. The motivation for using the packet counter and byte counter as taught by Connor (2004/0221080) into the communications network of Lin being that it provides the system more reliable since it prevents congestion the access point.

Allowable Subject Matter

5. Claims 4, 12-13, 15-18, 22, 30, 33-36, 39, 47, 48, 50-53, 56, 60-62, 66, 70-72, 76, and 80-82 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 9/26/06 have been fully considered but they are not persuasive.

In response to Applicant's arguments that Lin fails to teach or suggest a first node determines a hidden status of a second node in the table. Examiner respectfully disagrees. Lin teaches wireless stations (203 and 204 in Fig. 2a) that have a route function (203c, 204c and 205c in Fig. 2a). The routers have a connection list that determines the wireless station can/can not directly communicate with other wireless station (see col. 4, lines 55-67 and col. 5, lines 1-30). Therefore Lin teaches the step of determining the hidden status of other node in the table.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuc Tran
Assistant Examiner
Art Unit 2616

P.t
12/8/06


CHI PHAM
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12/8/06